

## PILE WEATHERSTRIPPING

5

### ABSTRACT

Pile weatherstripping is provided by a flat pile of strands which are tensioned to spring outwardly to straight condition to provide a pile weatherstrip, when bent and inserted into a T-slot or other kerf in a member such as a window or door frame or sash. The tendency of the bent parts of the pile to spring away from each other facilitates retention of the pile after insertion into the slot. A locking fin, more rigid than the pile, is preferably used. This locking fin engages steps or edges in the throat of the slot thereby impeding withdrawal of the weatherstripping from the slot. One or more barrier fins may also be assembled with the strands constituting the flat pile. The pile can be operated in bending mode or in columnar compression (crushing mode). Bending mode operation can be over a bending range so as to accommodate a large range of clearance between a sash and a frame or other members which are sealed by the pile weatherstripping. Parts of the pile can have desired lateral spacing and angular orientation with respect to each other (contour) by using spacing and/or contour forming elements assembled with the flat pile. Since the pile is flat until installed, it is readily wound on reels for shipment and storage until installation. Installation may be accomplished by a roller which pushes the flat pile into the slot. The slot may be disposed at an angle or in a corner of the member to be sealed and facilitates sealing around the entire perimeter of a surface to be sealed such as the exterior surfaces of a window sash or a frame in which this sash is movable.